



03-08-05 41-3762
PATENT
Attorney Docket No. F-5489 (0360-0166)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re application of:)
Thomas Westberg et al.)
Serial No. 09/389,504)
Filed: September 3, 1999)
Group Art No.: 3762)
Examiner: Patricia Bianco)
For: Blood Separation Systems)
Using Multiple Function)
Pump Station to Perform)
Different On-Line)
Processing Tasks)

CERTIFICATE OF MAILING BY EXPRESS MAIL
Express Mail Mailing Label No.: EV459444433US
Date of Deposit: March 7, 2005

I hereby certify that this paper or fee is being deposited
with the United States Postal Service "Express Mail Post
Office Box Addressee" service under 37 CFR 1.10 on the
date indicated above and is addressed to: Commissioner
for Patents, P.O. Box 1450, Arlington, VA 22313-1450

Name: Diane G. Kapil

Signature: *Diane G. Kapil*

Commissioner for Patents
P.O. Box 1450
Arlington, VA 22313-1450

TRANSMITTAL OF RECONSTRUCTED APPLICATION FILE

Transmitted herewith is a reconstructed file of the above-
identified application consisting of the following:

- A Status Inquiry dated 01/18/2005; ✓
- B Status Inquiry dated 10/29/2004; ✓
- C Request for Further Prosecution dated 01/14/2004; ✓
- D Request for Status dated 12/18/2003; ✓
- E Amendment A dated 06/03/2002 in response to Office ✓
- F Action dated 12/26/2001; ✓
- G Office Action dated 12/26/2001; ✓

G Request for Corrected Filing Receipt dated 02/09/2000; ✓
H Completion of Filing Requirements dated 12/01/1999; ~
J Notice to File Missing Parts of Application dated ✓
09/24/1999;
K Filing receipt dated 09/23/1999. ✓

Respectfully submitted,

Date: March 7, 2005

By: Gary W. McFarron
Gary W. McFarron
Reg. No. 27,357
COOK, ALEX, MC FARRON, MANZO,
CUMMINGS & MEHLER, LTD.
200 W. Adams St., Ste. 2850
Chicago, IL 60606
Phone: (312) 236-8500
Fax: (312) 236-8176



C

Misc Comm / Status #14
Patent

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Westberg et al.

Docket No. F-5489

Serial No.: 09/389,504

Examiner: P. Bianco

Filed: 3 September 1999

Group Art Unit: 3762

Title: Blood Separation Systems and Methods Using Multiple Function Pump Station to Perform Different On-Line Processing Tasks

REQUEST FOR FURTHER PROSECUTION

Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

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MAR 16 2005
TECHNOLOGY CENTER P3700

Dear Sir:

Following a Status Inquiry made by applicant on 18 December 2003, the Customer Service Center, Technology Center 3700 of the USPTO reported that the current status of the above reference application is: NON FINAL ACTION MAILED as of 12/26/2001. A copy of the Technology Center 3700 communication reporting the status is attached as Attachment 1.

Applicant mailed an Information Disclosure Statement and an Amendment in response to the Office Action with a certificate of mailing on 3 June 2002 (Attachment 2). The return postcard, date stamped by the Patent Office on 11 June 2002, has acknowledged receipt of this IDS and Amendment, and the post card is attached as Attachment 3).

Applicant has not received a Notice of Abandonment, and the official status of the matter does not indicate that the application is considered abandoned. It is therefore respectfully requested that the application proceed for further prosecution.

Acknowledgement of the active status of this application is respectfully requested.

Respectfully Submitted,

By

Daniel D. Ryan, Reg. No. 29,243

RYAN KROMHOLZ & MANION, S.C.
Post Office Box 26618
Milwaukee, Wisconsin 53226
(262) 783 - 1300
14 January 2004

CERTIFICATE OF FIRST CLASS MAIL

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail on the date indicated below in an envelope addressed to: Commissioner for Patents, PO Box 1450, Alexandria, VA 22313-1450.

By: _____

Judith Dunaway

Dated: _____

14 January 2004



PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Westberg et al.

Attorney Docket No.: 1006.F-5489

Serial No.: 09/389,504

Examiner: P. Bianco

Filed: 3 September 1999

Group Art Unit: 3762

For: Blood Separation Systems and Methods Using Multiple Function Pump Station to Perform Different On-Line Processing Tasks

Commissioner for Patents
Washington, D.C. 20231

AMENDMENT TRANSMITTAL

1. Transmitted herewith is an amendment for this application.

STATUS

2. Applicant is

☐ a small entity

☒ other than a small entity.

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MAR 16 2005
TECHNOLOGY CENTER R3700

CERTIFICATE OF MAILING (37 CFR 1.8(a))

I hereby certify that this paper (along with any referred to as being attached or enclosed) is being deposited with the United State Postal Service on the date shown below with sufficient postage as first class mail in an envelope addressed to the: Commissioner of Patents and Trademarks, Washington, D.C. 20231.

Date: 3 June 2002

Judith Dunaway

Type or print name of person mailing paper

(Signature of person mailing paper)

Attachment 2

EXTENSION OF TERM

NOTE: "Extension of Time in Patent Cases (Supplement Amendments) - If a timely and complete response has been filed after a Non-Final Office Action, an extension of time is not required to permit filing and/or entry of an additional amendment after expiration of the shortened statutory period.

If a timely response has been filed after a Final Office Action, an extension of time is required to permit filing and/or entry of a Notice of Appeal or filing and/or entry of an additional amendment after expiration of the shortened statutory period unless the timely-filed response placed the application in condition for allowance. Of course, if a Notice of Appeal has been filed within the shortened statutory period, the period has ceased to run." Notice of December 10, 1985 (1061 O.G. 34-35).

NOTE: See 37 CFR 1.645 for extensions of time in interference proceedings and 37 CFR 1.550(c) for extensions of time in reexamination proceedings.

3. The proceedings herein are for a patent application and the provisions of 37 CFR 1.136 apply
(complete (a) or (b) as applicable)

- (a) ☒ Applicant petitions for an extension of time under 37 CFR 1.136 (fees: 37 CFR 1.17(a)-(d) for the total number of months checked below:

Extension (months)	Fee for other than Small Entity	Fee for Small Entity
<input type="checkbox"/> one month	\$ 110.00	\$ 55.00
<input type="checkbox"/> two months	\$ 400.00	\$ 200.00
<input checked="" type="checkbox"/> three months	\$ 920.00	\$ 460.00
<input type="checkbox"/> four months	\$1440.00	\$ 720.00

Fee: \$ 920.00

If an additional extension of time is required please consider this a petition therefor.

(check and complete the next item, if applicable)

- ☐ An extension for _____ months has already been secured and the fee paid therefor of \$ _____ is deducted from the total fee due for the total months of extension now requested.

Extension fee due with this request: \$ _____

OR

- (b) ☐ Applicant believes that no extension of term is required. However, this conditional petition is being made to provide for the possibility that applicant has inadvertently overlooked the need for a petition for extension of time.

FEE FOR CLAIMS

4. The fee for claims (37 CFR 1.16(b)-(d)) has been calculated as shown below:

	Claims Remaining After Amendment	Highest No. Previously Paid For	Present. Extra	Rate	Additional Fee (Small Entity)	Additional Fee (Large Entity)
Total Claims 37 CFR 1.16(c)*	51	(46)	5	x \$ 9.00	\$45	\$90
Independent Claims (37 CFR 1.16(b)**	7	-4 =	3	x \$ 42.00	\$126	\$252
First Presentation of Multiple Dependent claim(s) if any (37 CFR 1.16(d))	1			\$140.00	\$140	\$280
Total Additional Fee					\$311	\$622

- * If the "Highest No. Previously Paid for" IN THIS SPACE is less than 20, enter "20".
 ** If the "Highest No. Previously Paid For" IN THIS SPACE is less than 3, enter "3".

The "Highest No. Previously Paid For" (Total or indep.) is the highest number found in the appropriate box in Col. 1 of a prior amendment or the number of claims originally filed.

WARNING: "After final rejection or action (S 1.113) amendments may be made cancelling claims or complying with any requirement of form which has been made." 37 CFR S 1.116(a) (emphasis added).

(complete (c) or (d) as applicable)

(c) ☐ No additional fee for claims is required.

OR

(d) ☒ Total additional fee for claims required \$ 622.00.

FEE PAYMENT

5. ☒ Attached is a check in the sum of \$ 1722.00. (Three Month Extension of Time, IDS, and Additional Claim Fee)

☐ Charge Account No. _____ the sum of \$ _____.

A duplicate of this transmittal is attached.

FEE DEFICIENCY

NOTE: *If there is a fee deficiency and there is no authorization to charge an account, additional fees are necessary to cover the additional time consumed in making up the original deficiency. If the maximum, six-month period has expired before the deficiency is noted and corrected, the application is held abandoned. In those instances where authorization to charge is included, processing delays are encountered in returning the papers to the PTO Finance Branch in order to apply these charges prior to action on the cases. Authorization to charge the deposit account for any fee deficiency should be checked. See the Notice of April 7, 1986, (1065 O.G. 31-33).*

6. ☒ If any additional extension and/or fee is required, charge Account No. 06-2360.

AND/OR

- ☒ If any additional fee for claims is required charge Account No. 06-2360



SIGNATURE OF ATTORNEY

Reg. No.: 29,243

Daniel D. Ryan

TYPE OR PRINT NAME OF ATTORNEY

Tel. No.: (262) 783 - 1300

RYAN KROMHOLZ & MANION, S.C.

P.O. ADDRESS

Post Office Box 26618

Milwaukee, Wisconsin 53226

Amendment to patent application of Westberg et al., in response to Office Action mailed 26 December 2001, Serial No. 09/389,504 filed 3 September 1999 for Blood Separation Systems and Methods Using Multiple Function Pump Station to Perform Different On-Line Processing Tasks, consisting of: transmittal letter; 19 page typewritten response; Information Disclosure Statement (2 page transmittal letter, form PTO 1449 with copies of references cited); and Check No. 10374 \$1722.00

F-5489
Mailed 3 June 2002

RYAN KROMHOLZ & MANION, S.C.

10374

DATE	DESCRIPTION	INVOICE #	CHECK		NET AMOUNT
			AMOUNT	DEDUCTION	
06/03/02	Commissioner of Patents and Trademarks Baxter Fenwal; 1006.F-5489; S/N 09/389,504		1722.00		1722.00

CHECK DATE	CONTROL NUMBER	TOTALS ▶	Gross:	Ded:	0.00	Net:	1722.00
06/03/02	10374		1722.00				

RYAN KROMHOLZ & MANION, S.C.
POST OFFICE BOX 26618
MILWAUKEE, WI 53226-0618

ASSOCIATED BANK
MILWAUKEE OFFICE
MILWAUKEE, WI 53201-0522
12-94-750

10374

DATE	CHECK	AMOUNT
06/03/02		**\$1,722.00

PAY *** ONE THOUSAND SEVEN HUNDRED TWENTY-TWO & 00/100 DOLLARS
TO THE ORDER OF: Commissioner of Patents and Trademarks
Washington DC 20231

WJF



#15

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Westberg et al.

Group: Unknown

Serial No.: 09/389,504

Examiner: Unknown

Filed: September 3, 1999

For: Blood Separation Systems and Methods Using a Multiple Function Pump Station to Perform Different On-Line Processing Tasks

Commissioner of Patents and Trademarks
Washington, D.C. 20231
ATTENTION: Application DivisionRECEIVED
MAR 16 2005
TECHNOLOGY CENTER R3700

COMPLETION OF FILING REQUIREMENTS

(check and complete this item, if applicable)

I. ☒ This replies to the Notice to File Missing Parts of Application (PTO-1533) mailed
September 24, 1999.

NOTE: If these papers are filed before the office letter issues adequate identification of the original papers should be made, e.g., in addition to the name of the inventor and title of invention, the filing date based on the "Express Mail" procedure, the serial number from the return post card or the attorney's docket number added.

☒ A copy of the Notice to File Missing Parts of Application-Filing Date Granted (Form PTO-1533) is enclosed.

NOTE: The PTO requires that a copy of Form PTO-1533 be returned with the response to the notice to file missing parts to the application.

DECLARATION OR OATH

II. ☒ No original declaration or oath was filed and enclosed is the original declaration or oath for this application.

CERTIFICATE OF MAILING (37 CFR 1.8a)

I hereby certify that this paper (along with any paper referred to as being transmitted therewith) is being deposited with the United States Postal Service on the date shown below with sufficient postage as first class mail in an envelope addressed to the: Commissioner of Patents and Trademarks, Washington, D.C. 20231.

Judith Biebel

(Type or print name of person mailing paper)

Date:

12/1/99

(Signature of person mailing paper)

OR

- ☐ The original declaration or oath which was filed was determined to be defective. A new original oath or declaration is attached.

NOTE: 37 CFR 1.41(a) points out that "Full names must be stated, including the family name and at least one given name without abbreviation together with any other given name or initial."

NOTE: For surcharge fee for filing declaration after filing date complete item VI(3) below.

NOTE: Acceptable minimums in the declaration for identification of the specification to which it applies are the name of the inventor AND (1) SERIAL NUMBER (2) ATTORNEY DOCKET NUMBER WHICH WAS ON THE APPLICATION AS FILED AND THE FILING DATE (3) TITLE OF THE INVENTION AND FILING DATE (4) TITLE OF INVENTION AND REFERENCE TO A SPECIFICATION WHICH IS ATTACHED TO THE DECLARATION AT THE TIME OF EXECUTION AND FILED WITH THE DECLARATION OR (5) TITLE OF INVENTION AND A STATEMENT BY A REGISTERED ATTORNEY THAT THE APPLICATION FILED IN THE PTO IS THE APPLICATION WHICH THE INVENTOR EXECUTED BY SIGNING THE DECLARATION. IF IDENTIFICATION (4) IS USED IT MUST BE ACCOMPANIED BY A STATEMENT THAT THE "ATTACHED" SPECIFICATION IS A COPY OF THE SPECIFICATION AND ANY AMENDMENTS THERETO WHICH WERE FILED IN THE PTO TO OBTAIN THE FILING DATE; SUCH A STATEMENT MUST BE A VERIFIED STATEMENT IF MADE BY A PERSON NOT REGISTERED TO PRACTICE BEFORE THE PTO. NOTICE OF SEPTEMBER 12, 1983 (1035 O.G. 3).

NOTE: Another minimum found acceptable in the declaration is the filing date (i.e., date of express mail) and the express mail number, useful where the serial number is not yet known. But note the practice where the express mail deposit is a Saturday, Sunday or holiday within the District of Columbia. 37 CFR 1.10(c).

(complete (c) or (d), if applicable)

Attached is a

- (c) ☒ Statement by a registered attorney that the application filed in the PTO is the application which the inventor executed by signing the declaration.
- (d) ☐ Statement that the "attached" specification is a copy of the specification and any amendments thereto which were filed in the PTO to obtain the filing date.

AMENDMENT CANCELLING CLAIMS

- III. ☐ Cancel claims _____ inclusive.

TRANSMITTAL OF ENGLISH TRANSLATION OF NON-ENGLISH LANGUAGE PAPERS

IV.

- ☐ Submitted herewith is a verified English translation of the non-English language application papers as originally filed. It is requested that this translation be used as the copy for examination purposes in the PTO.

NOTE: For fee processing a non-English application complete item VI(5) below.

NOTE: A non-English oath or declaration in the form provided or approved by the PTO need not be translated. 37 CFR 1.69(b).

NOTE: The translation for a regular application filed in a foreign language must be verified. 37 CFR 1.52(d).

SMALL ENTITY STATUS

V.

☐ A verified statement that this filing is by a small entity

NOTE: *If an original verified statement and a refund request is filed within two months of the date of payment of a fee then the excess fee paid will be refunded on request. 37 CFR 1.28(A).*

(check and complete applicable items)

☐ is attached

☐ a separate refund request accompanies this paper

☐ was filed on _____ (original)

VI.

COMPLETION FEES

WARNING: *Failure to submit the surcharge fees where required will cause the application to become abandoned. 37 CFR 1.53(d).*

NOTE: *The filing fees, fees for claims and surcharge fees listed below in items 1, 2 and 3 are reduced by 50% where proof of a small entity status is established on or before the date the fee is paid. If the full fee was paid but a verified statement is filed within 2 months of the date of timely payment of a fee then the excess fee paid will be refunded on request. 37 CFR 1.28(a).*

1. Filing fee

☒ original patent application (37 CFR 1.16(a))
\$760.00; Small entity-\$380.00 \$ 760.00

☐ design application (37 CFR 1.16(f))
\$310.00; small entity-\$155.00 \$ _____

2. fees for claims

☒ each independent claim in excess of 3
(37 CFR 1.16(b))-\$78.00; small entity-\$39.00 \$ 78.00

☒ each claim in excess of 20
(37 CFR 1.16(c))-\$18.00; small entity-\$9.00 \$ 468.00

☐ multiple dependent claim(s)
(37 CFR 1.16(d))-\$260.00; small entity-\$130.00 \$ _____

3. surcharge fees

☒ late payment of filing fee

and/or

☒ late filing of original declaration or oath
(37 CFR 1.16(e))-\$130.00; small entity-\$65.00; \$ 130.00

NOTE: *Even where a facsimile declaration or oath signed by the inventor(s) was part of the originally filed papers the surcharge fee is required.*

NOTE: *If both the filing fee and declaration or oath were missing from the original papers only one surcharge fee for both need be paid. 37 CFR 1.16(e).*

4. ☐ petition and fee for filing by other than all the inventors
or a person not the inventor
(37 CFR 1.17(h) and 1.47-\$130.00) \$ _____
5. ☐ fee for processing an application filed with a specification
in a non-English language
(37 CFR 1.17(k) and 1.52(d)-\$130.00) \$ _____
6. ☐ fee for processing and retention of application
(37 CFR 1.21(l) and 1.53(d)-\$300.00) \$ _____

NOTE: 37 CFR 1.21(l) establishes a fee for processing and retaining any application which is abandoned for failing to complete the application pursuant to 37 CFR 1.53(d) and this, as well as, the changes to 37 CFR 1.53 and 1.78 indicate that in order to obtain the benefit of a prior U.S. application, either the basic filing fee or the processing and retention fee of S 1.21(1) within 1 year of notification under S1.53(d) must be paid.

Total completion fees \$ 1436.00

VII.

EXTENSION OF TIME

(complete (a) or (b) as applicable)

The proceedings herein are for a patent application and the provisions of 37 CFR 1.136(a) apply.

- (a) ☒ Applicant petitions for an extension of time, the fees for which are set out in 37 CFR 1.17(a)-(d), for the total number of months checked below:

Extension (months)	Fee for other than Small Entity	Fee for Small Entity
<input checked="" type="checkbox"/> one month	\$ 110.00	\$ 55.00
<input type="checkbox"/> two months	\$ 380.00	\$190.00
<input type="checkbox"/> three months	\$ 870.00	\$435.00
<input type="checkbox"/> four months	\$1360.00	\$680.00

If an additional extension of time is required please consider this a petition therefor.

(check and complete the next item, if applicable)

- ☐ An extension for _____ months has already been secured and the fee paid therefor of \$_____ is deducted from the total fee due for the total months of extension now requested.

Extension fee due with this request \$ 110.00

or

- (b) ☐ Applicant believes that no extension of term is required. However, this conditional petition is being made to provide for the possibility that applicant has inadvertently overlooked the need for a petition and fee for extension of time.

VIII.

TOTAL FEE DUE

The total fee due is

Completion fee(s) \$ 1436.00

Extension fee (if any) \$ 110.00

TOTAL FEE DUE \$ 1546.00

IX.

PAYMENT OF FEES

- ☒ enclosed is a check in the amount of \$ 1586.00 (includes assignment recordal)
- ☐ charge Account No. _____ in the amount of \$ _____. A duplicate of this request is attached.

NOTE: Fees should be itemized in such a manner that it is clear for which purpose the fees are paid. 37 CFR 1.22(b).

X.

AUTHORIZATION TO CHARGE ADDITIONAL FEES

WARNING: ACCURATELY COUNT CLAIMS, ESPECIALLY MULTIPLE DEPENDANT CLAIMS, TO AVOID UNEXPECTED HIGH CHARGES IF EXTRA CLAIMS ARE AUTHORIZED.

- ☒ The Commissioner is hereby authorized to charge the following additional fees which may be required by this paper and during the pendency of this application to Account No. 06-2360.
- ☒ 37 CFR 1.16 (a), (f) or (g) (filing fees)
- ☒ 37 CFR 1.16 (b), (c) and (d) (presentation of extra claims)

NOTE: Because additional fees for excess or multiple dependent claims not paid on filing or on later presentation must only be paid or these claims cancelled by amendment prior to the expiration of the time period set for response by the PTO in any notice of fee deficiency (37 CFR 1.16(d)), it might be best not to authorize the PTO to charge additional claim fees, except possibly when dealing with amendments after final action.

- ☒ 37 CFR 1.16(e) (surcharge for filing the basic filing fee and/or declaration on a date later than the filing date of the application)
- ☒ 37 CFR 1.17 (application processing fees)

WARNING: WHILE 37 CFR 1.17(A), (B), (C) AND (D) DEAL WITH EXTENSIONS OF TIME UNDER S 1.136(A) THIS AUTHORIZATION SHOULD BE MADE ONLY WITH THE KNOWLEDGE THAT: "SUBMISSION OF THE APPROPRIATE EXTENSION FEE UNDER 37 CFR 1.136(A) IS TO NO AVAIL UNLESS A REQUEST OR PETITION FOR EXTENSION IS FILED." (EMPHASIS ADDED). NOTICE OF NOVEMBER 5, 1985 (1060 O.G. 27).

- ☐ 37 CFR 1.18 (issue fee at or before mailing of Notice of Allowance, pursuant to 37 CFR 1.311(b))

NOTE: Where an authorization to charge the issue fee to a deposit account has been filed before the mailing of a Notice of Allowance, the issue fee will be automatically charged to the deposit account at the time of mailing the notice of allowance. 37 CFR 1.311(b).

NOTE: 37 CFR 1.28(b) requires "Notification of any change in loss of entitlement to small entity status must be filed in the application ... prior to paying, or at the time of paying ... issue fee". From the wording of 37 CFR 1.28(b): (a) notification of change of status must be made even if the fee is paid as "other than a small entity" and (b) no notification is required if the change is to another small entity.

Reg. No. 29,243

Telephone No.: (414) 271 - 6555



SIGNATURE OF ATTORNEY

Daniel D. Ryan

Type or print name of attorney
RYAN KROMHOLZ & MANION, S.C.

633 West Wisconsin Avenue

Milwaukee, Wisconsin 53203



Copy 3 #4 (

Patent

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application of : Westberg et al. Examiner: Unknown
Serial No. : 09/389,504 Group Art Unit: 3735
Filed : September 3, 1999
For : Blood Separation Systems and Methods Using a Multiple Function Pump Station
to Perform Different On-line Processing Tasks

REQUEST FOR CORRECTED FILING RECEIPT

Commissioner of Patents
and Trademarks
Washington, D.C. 20231

RECEIVED
MAR 16 2005
TECHNOLOGY CENTER R3700

Sir:

Enclosed is a copy of the official filing receipt issued in the above matter.

Applicant requests the Patent Office to issue a new, corrected Filing Receipt in the above matter as follows:

1. Applicant requested all correspondence to be sent to the following address:

BAXTER HEALTHCARE CORPORATION
Bradford R.L. Price, Fenwal Division RLP-30
Route 120 and Wilson Road
Round Lake, Illinois 60073

2. The name for the lead inventor, Tom Westberg, has been incorrectly entered on the filing receipt.

(A copy of the Declaration/Power of Attorney submitted in this matter which shows the correspondence address and correct spelling of all inventors' names is attached.)

All requested changes are shown in red on the attached copy of the official filing receipt.

Respectfully submitted,

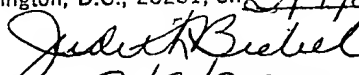
By


Daniel D. Ryan
Registration No. 29,243

RYAN KROMHOLZ & MANION, S.C.
P.O. Box 26618
Milwaukee, Wisconsin 53226
(262) 797 - 6700
February 9, 2000
F-5489

I hereby certify that this correspondence is
being deposited with the United States Postal
Service as first class mail in an envelope addressed
to: Commissioner of Patents and Trademarks,
Washington, D.C., 20231, on 2/9/2000

By
Dated


2/9/2000

FILING RECEIPT
CORRECTED



UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office
ASSISTANT SECRETARY AND COMMISSIONER
OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

APPLICATION NUMBER	FILING DATE	GRP ART UNIT	FIL FEE REC'D	ATTORNEY DOCKET NO.	DRWGS	TOT CL	IND CL
09/389,504	09/03/99	3735	\$1,436.00 F-5489		43	46	14

~~DANIEL D RYAN
RYAN KROMHOLZ & MANION S C
633 WEST WISCONSIN AVENUE
MILWAUKEE WI 53203~~

*Baxter Healthcare Corporation
Bradford R.L. Price, Fenwal Division RLP-3
Route 120 & Wilson Road
Round Lake, IL 60073*

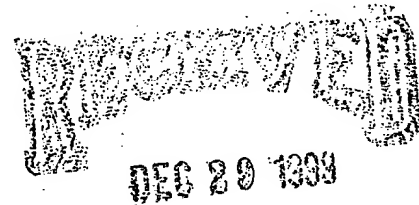
Receipt is acknowledged of this nonprovisional Patent Application. It will be considered in its order and you will be notified as to the results of the examination. Be sure to provide the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION when inquiring about this application. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. If an error is noted on this Filing Receipt, please write to the Office of Initial Patent Examination's Customer Service Center. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts of Application" ("Missing Parts Notice") in this application, please submit any corrections to this Filing Receipt with your reply to the "Missing Parts Notice." When the PTO processes the reply to the "Missing Parts Notice," the PTO will generate another Filing Receipt incorporating the requested corrections (if appropriate).

Applicant(s) ^{TOM} THOMAS WESTBERG, GURNEE, IL; ROHIT VISHNOI, DEERFIELD, IL; MARK VANDLIK, MUNDELEIN, IL.

IF REQUIRED, FOREIGN FILING LICENSE GRANTED 09/23/99
TITLE

BLOOD SEPARATION SYSTEMS AND METHODS USING A MULTIPLE FUNCTION PUMP
STATION TO PERFORM DIFFERENT ON-LINE PROCESSING TASKS

PRELIMINARY CLASS: 604

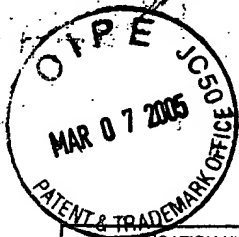


RYAN KROMHOLZ & MANION S.C.
RECEIVED
1-21-2000

DATA ENTRY BY: MEREDITH, WANDA

TEAM: 03 DATE: 12/13/99





PH 2
UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

APPLICATION NUMBER	FILING/RECEIPT DATE	FIRST NAMED APPLICANT	ATTORNEY DOCKET NO./TITLE
09/389,504	09/03/99	WESTBERG	T F-5489

023270924
DANIEL D RYAN
RYAN KROMHOLZ & MANION S C
633 WEST WISCONSIN AVENUE
MILWAUKEE WI 53203

NOT ASSIGNED

3735

DATE MAILED:

09/24/99

NOTICE TO FILE MISSING PARTS OF APPLICATION
Filing Date Granted

An Application Number and Filing Date have been assigned to this application. The items indicated below, however, are missing. Applicant is given TWO MONTHS FROM THE DATE OF THIS NOTICE within which to file all required items and pay any fees required below to avoid abandonment. Extensions of time may be obtained by filing a petition accompanied by the extension fee under the provisions of 37 CFR 1.136(a). If any of items 1 or 3 through 5 are indicated as missing, the SURCHARGE set forth in 37 CFR 1.16(e) of ☐ \$65.00 for a small entity in compliance with 37 CFR 1.27, or ☒ \$130.00 for a non-small entity, must also be timely submitted in reply to this NOTICE to avoid abandonment.

If all required items on this form are filed within the period set above, the total amount owed by applicant as a

☐ small entity (statement filed) ☒ non-small entity is \$ 2216.00.

☒ 1. The statutory basic filing fee is:

- ☒ missing.
☐ insufficient.

Applicant must submit \$ 760.00 to complete the basic filing fee and/or file a small entity statement claiming such status (37 CFR 1.27).

☒ 2. The following additional claims fees are due:

\$ 468.00 for 26 total claims over 20.

\$ 858.00 for 11 independent claims over 3.

\$ _____ for multiple dependent claim surcharge.

Applicant must either submit the additional claim fees or cancel additional claims for which fees are **TECHNOLOGY CENTER R3700**

☒ 3. The oath or declaration:

☒ is missing or unsigned.

☐ does not cover the newly submitted items.

An oath or declaration in compliance with 37 CFR 1.63, including residence information and identifying the application by the above Application Number and Filing Date is required.

☐ 4. The signature(s) to the oath or declaration is/are by a person other than inventor or person qualified under 37 CFR 1.42, 1.43 or 1.47.

A properly signed oath or declaration in compliance with 37 CFR 1.63, identifying the application by the above Application Number and Filing Date, is required.

☐ 5. The signature of the following joint inventor(s) is missing from the oath or declaration:

An oath or declaration in compliance with 37 CFR 1.63 listing the names of all inventors and signed by the omitted inventor(s), identifying this application by the above Application Number and Filing Date, is required.

☐ 6. A \$50.00 processing fee is required since your check was returned without payment (37 CFR 1.21(m)).

☐ 7. Your filing receipt was mailed in error because your check was returned without payment.

☐ 8. The application was filed in a language other than English.

Applicant must file a verified English translation of the application, the \$130.00 set forth in 37 CFR 1.17(k), unless previously submitted, and a statement that the translation is accurate (37 CFR 1.52(d)).

☐ 9. OTHER:

Direct the reply and any questions about this notice to "Attention: Box Missing Parts."

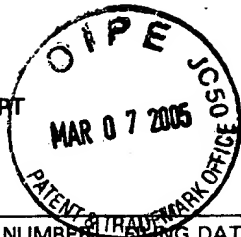
A copy of this notice MUST be returned with the reply.

W M Meredith

Customer Service Center

11/20/99

FILING RECEIPT



UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office
ASSISTANT SECRETARY AND COMMISSIONER
OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

Dupl. 84

APPLICATION NUMBER	FILING DATE	GRP ART UNIT	FIL FEE REC'D	ATTORNEY DOCKET NO.	DRWGS	TOT CL	IND CL
09/389,504	09/03/99	3735	\$0.00 F-5489		43	46	14

DANIEL D RYAN
RYAN KROMHOLZ & MANION S C
633 WEST WISCONSIN AVENUE
MILWAUKEE WI 53203

Receipt is acknowledged of this nonprovisional Patent Application. It will be considered in its order and you will be notified as to the results of the examination. Be sure to provide the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION when inquiring about this application. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. If an error is noted on this Filing Receipt, please write to the Office of Initial Patent Examination's Customer Service Center. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts of Application" ("Missing Parts Notice") in this application, please submit any corrections to this Filing Receipt with your reply to the "Missing Parts Notice." When the PTO processes the reply to the "Missing Parts Notice," the PTO will generate another Filing Receipt incorporating the requested corrections (if appropriate).

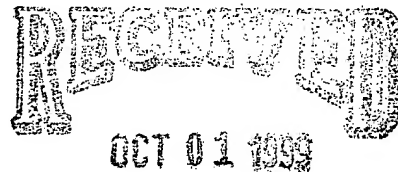
Applicant(s) THOMAS WESTBERG, N/A; ROHIT VISHNOI, N/A; MARK VANDLIK,
N/A.

IF REQUIRED, FOREIGN FILING LICENSE GRANTED 09/23/99

TITLE

BLOOD SEPARATION SYSTEMS AND METHODS USING A MULTIPLE FUNCTION PUMP
STATION TO PERFORM DIFFERENT ON-LINE PROCESSING TASKS

PRELIMINARY CLASS: 604



RYAN KROMHOLZ & MANION S.C.

DATA ENTRY BY: MEREDITH, WANDA

TEAM: 03 DATE: 09/23/99



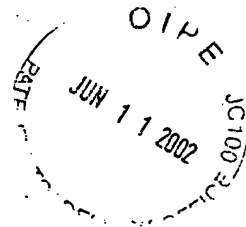
(See reverse for new important information)



Amendment to patent application of Westberg et al., in response to Office Action mailed 26 December '01, Serial No. 09/389,504 filed 3 September 1999 for Blood Separation Systems and Methods Using Multiple Function Pump Station to Perform Different On-Line Processing Tasks, consisting of: transmittal letter; 19 page typewritten response; Information Disclosure Statement (2 page transmittal letter, form PTO 1449 with copies of references cited); and Check No. 10374 \$1722.00

F-5489

Mailed 3 June 2002



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Attachment 3



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* Copy of p. #7

PATENT

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Attorney Docket No. F-5489

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Westberg et al. Group Art Unit: 3762
Serial No: 09/389,504 Examiner: P. Bianco
Filed: September 3, 1999
For: Blood Separation Systems and Methods Using Multiple Function Pump
Station to Perform Different On-Line Processing Tasks

Commissioner of Patents
Washington, D.C. 20231

TRANSMITTAL OF INFORMATION DISCLOSURE STATEMENT BEFORE MAILING DATE
OF EITHER A FINAL ACTION OR NOTICE OF ALLOWANCE (37 CFR 1.97(c))

NOTE: "An information disclosure statement shall be considered by the Office if filed ... before the mailing date of either (1) a final action under S 1.113 or (2) a notice of allowance under S 1.311, whichever occurs first, provided the statement is accompanied by either a certification as specified in paragraph (e) of this section or the fee set forth in S 1.17(p)." 37 CFR 1.97(c).

NOTE: "If a final action or notice of allowance is mailed in an application and later withdrawn, the application will be considered as not having had a final action or notice of allowance mailed for purposes of considering an information disclosure statement." Notice of April 20, 1992 (1138 O.G. 37-41, 39).

NOTE: "If information submitted during the period set forth in 37 CFR 1.97(c) with a certification is used in a new ground of rejection on unamended claims, the next Office action will not be made final since in this situation it is clear that applicant has submitted the information to the office promptly after it has become known and the information is being submitted prior to a final determination on patentability by the Office. However, the information submitted with a certification can be used in a new ground of rejection and the next Office action made final, [i]f the new ground of rejection was necessitated by amendment of the application by applicant. Where the information is submitted during this period with a fee, the examiner may use the information submitted, e.g., printed publication or evidence of public use, and make the next Office action final whether or not the claims have been amended, provided that no other new ground of rejection which was not necessitated by amendment to the claims is introduced by the examiner. See MPEP 706.07(a). If a new ground of rejection is introduced that is neither necessitated by an amendment to the claims nor based on the information submitted with the fee set forth in 37 CFR 1.17(p), the Office action shall not be made final." Notice of April 20, 1992 (1138 O.G. 37-41, 39).

WARNING: "A PETITION FOR SUSPENSION OF ACTION TO ALLOW APPLICANT TIME TO SUBMIT AN INFORMATION DISCLOSURE STATEMENT WILL BE DENIED AS FAILING TO PRESENT GOOD AND SUFFICIENT REASONS, SINCE 37 CFR 1.97 PROVIDES ADEQUATE RECOURSE FOR THE TIMELY SUBMISSION OF PRIOR ART FOR CONSIDERATION BY THE EXAMINER." NOTICE OF JULY 6, 1992 (1141 O.G. 63).

TIME OF TRANSMITTAL OF ACCOMPANYING INFORMATION
DISCLOSURE STATEMENT

1. The information disclosure statement transmitted herewith is being filed AFTER THREE MONTHS OF THE FILING DATE OF THIS NATIONAL APPLICATION OR THE DATE OF ENTRY OF THE NATIONAL STAGE AS SET FORTH IN S 1.491 IN AN INTERNATIONAL APPLICATION OR AFTER THE MAILING DATE OF THE FIRST OFFICE ACTION ON THE MERITS, WHICHEVER EVENT OCCURRED LAST BUT BEFORE THE MAILING DATE OF EITHER:

CERTIFICATE OF MAILING (37 CFR 1.8a)G

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail, in an envelope addressed to: Commissioner of Patents and Trademarks, Washington, D.C. 20231, on 3 June 2002

Judith Dunaway

Signature of Person Signing

Type or Print Name of Person Signing

- (1) a final action under S 1.113 or
(2) a notice of allowance under S 1.311,
whichever occurs first.

CERTIFICATION OR FEE

2. Accompanying this transmittal is
(check either A or B below)
A. ☐ a certification as specified in 37 CFR 1.97(e)
OR
B. ☒ the fee set forth in 37 CFR 1.17(p) for submission of an information disclosure statement under S 1.97(c). (\$180.00).

FEE PAYMENT

(complete this item, if applicable)

3. Applicant elects the option to pay the fee set forth in 37 CFR 1.17(p) for submission of an information disclosure statement under S 1.97(c) (\$180.00).

Fee due \$ 180.00

METHOD OF PAYMENT OF FEE

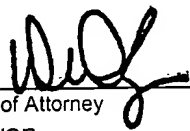
4. ☒ Attached is check in the amount of \$ 180.00
☐ Charge Account No. _____ in the amount of \$ _____
A duplicate of this request is attached.

The submission of any document herewith is not intended as an admission that such document constitutes prior art against the claims of the present application or that such document is considered material to patentability as defined in 37 CFR §1.56(b). Applicant does not waive any rights to take any action which would be appropriate to antedate or otherwise remove as a competent reference any document which is determined to be a *prima face* prior art reference against the claims of the present application.

If any additional fees are due, please charge Account No. 06-2360.

Reg. No. 29,243

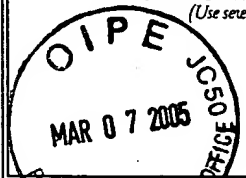
Telephone No.: (262) 783 - 1300



Signature of Attorney
Daniel D. Ryan

Type or Print Name of Attorney of Record
RYAN KROMHOLZ & MANION, S.C.
Post Office Box 26618
Milwaukee, Wisconsin 53226

Mailing Address of Sender

LIST OF PRIOR ART CITED BY APPLICANT <i>(Use several sheets if necessary)</i> 	ATTY DOCKET NO. F-5489	SERIAL NO. 09/389,504
	APPLICANT Westberg et al.	
	FILING DATE 09/03/99	GROUP 3762

U.S. PATENT DOCUMENTS

Examiner Initial	DOCUMENT NUMBER	Date	Name	Class	Subclass	Filing Date (If Appropriate)
	4,778,451	10/18/88	Kamen			
	4,479,760	10/30/84	Bilstad et al.			
	4,479,762	10/30/84	Bilstad et al.			
	4,808,161	02/28/89	Kamen			
	4,865,584	09/12/89	Epstein et al.			
	5,062,774	11/05/91	Kramer et al.			
	5,088,515	02/18/92	Kamen			
	5,108,367	04/28/92	Epstein et al.			
	5,178,182	01/12/93	Kamen			
	5,193,990	03/16/93	Kamen et al.			
	5,350,357	09/27/94	Kamen et al.			

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FOREIGN PATENT DOCUMENTS

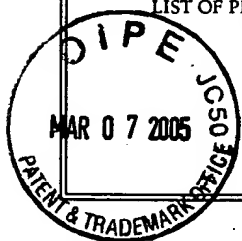
		DOCUMENT NUMBER	DATE	COUNTRY	Class	Subclass	Translation Yes No
		WO98/22165		PCT			
		WO 98/22163		PCT			
		wo 96/40328		PCT			
		WO 95/20985		PCT			
		WO 97/09074		PCT			

OTHER PRIOR ART *(Including Author, Title, Date, Pertinent Pages, Etc.)*

			Therakos Brochure Circa 1998

EXAMINER	DATE CONSIDERED
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EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this of with next communication to applicant.



LIST OF PRIOR ART CITED BY APPLICANT
(Use several sheets if necessary)

ATTY DOCKET NO.

F-5489

SERIAL NO.

09/389,504

APPLICANT

Westberg et al.

FILING DATE

09/03/99

GROUP

3762

U.S. PATENT DOCUMENTS

Examiner Initial	DOCUMENT NUMBER	Date	Name	Class	Subclass	Filing Date (If Appropriate)
	5,421,823	06/06/95	Kamen et al.			
	5,431,626	07/11/95	Bryant et al			
	5,437,624	08/01/95	Langley			
	5,438,510	08/01/95	Bryant et al			
	5,474,683	12/12/95	Bryant et al			
	5,628,908	5/13/97	Kamen et al			
	5,634,896	06/03/97	Bryant et al			
	5,651,766	07/29/97	Kingsley et al			
	5,676,644	10/14/97	Toavs et al			
	5,746,719	05/05/98	Farra et al			
	5,755,683	05/26/98	Houle et al			

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FOREIGN PATENT DOCUMENTS

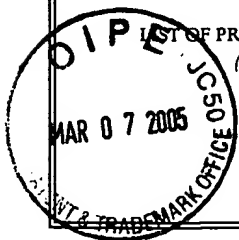
	DOCUMENT NUMBER	DATE	COUNTRY	Class	Subclass	Translation Yes No
	WO 97/02059		PCT			
	EP 0771569		EP			
	WO 96/40319		PCT			

OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)

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(Use several sheets if necessary)

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F-5489

SERIAL NO.

09/389,504

APPLICANT

Westberg et al.

FILING DATE

09/03/99

GROUP

3762

U.S. PATENT DOCUMENTS

Examiner Initial	DOCUMENT NUMBER	Date	Name	Class	Subclass	Filing Date (If Appropriate)
	5,769,811	06/23/98	Stacey et al.			
	5,938,634	08/17/99	Packard			
	5,951,509	09/14/99	Morris			
	6,106,498	08/22/00	Friedli et al			
	5,722,947	03/03/98	Jeppsson et al.			
	4,816,019	03/28/89	Kamen			
	4,077,882	3/7/78	Gangemi			
	4,858,883	8/22/89	Webster			
	6,071,423	6/6/00	Brown et al			
	4,119,120	10/10/78	Mehaffy et al			
	B1 5,344,568	9/7/99	Kitaevich et al			

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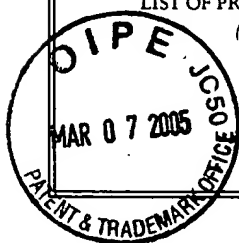
		DOCUMENT NUMBER	DATE	COUNTRY	Class	Subclass	Translation Yes No

OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)

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F-5489

SERIAL NO.

09/389,504

APPLICANT

Westberg et al.

FILING DATE

3 September 1999

GROUP

3762

U.S. PATENT DOCUMENTS

Examiner Initial	DOCUMENT NUMBER	Date	Name	Class	Subclass	Filing Date (If Appropriate)
	5,746,708	5/5/98	Giesler et al			
	4,828,543	5/9/89	Weiss et al.			
	4,486,189	12/4/84	Troutner et al.			
	4,479,761	10/30/84	Bilstad et al			
	5,921,951	7/13/99	Morris			
	5,593,290	1/14/97	Greisch et al.			
	4,285,464	8/25/81	Latham Jr.			
	4,776,964	10/11/88	Schoendorfer et al.			
	5,762,791	6/9/98	Deniega et al			
	5,738,796	4/14/98	Bormann et al			
	5,462,416	10/31/95	Dennehey et al.			

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FOREIGN PATENT DOCUMENTS

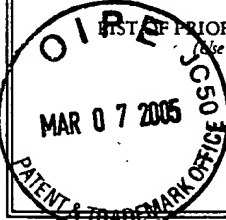
	DOCUMENT NUMBER	DATE	COUNTRY	Class	Subclass	Translation Yes No

OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)

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	ATTY DOCKET NO. F-5489	SERIAL NO. 09/389,504
	APPLICANT Westberg et al.	
	FILING DATE 3 September 1999	GROUP 3762

U.S. PATENT DOCUMENTS

Examiner Initial	DOCUMENT NUMBER	Date	Name	Class	Subclass	Filing Date (If Appropriate)
	5,989,438	11/23/99	Fumiyama			
	5,482,440	1/9/96	Dennehey et al			
	5,871,693	2/16/99	Lindsay			
	5,311,908	5/17/94	Barone et al.			
	5,273,517	12/28/93	Barone et al			
	4,965,846	10/23/90	Williamson IV			
	4,410,341	10/18/83	Edwards et al.			
	3,681,899	8/8/72	Grote			
	5,178,603	1/12/93	Prince			
	4,954,128	9/4/90	Ford			
	4,447,191	5/8/84	Bilstad et al			

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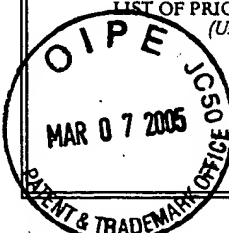
FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	Class	Subclass	Translation Yes No

OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)

EXAMINER	DATE CONSIDERED
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<p>LIST OF PRIOR ART CITED BY APPLICANT (Use several sheets if necessary)</p> 	ATTY DOCKET NO. F-5489	SERIAL NO. 09/389,504
	APPLICANT Westberg et al.	
	FILING DATE 3 September 1999	GROUP 3762

U.S. PATENT DOCUMENTS

Examiner Initial	DOCUMENT NUMBER	Date	Name	Class	Subclass	Filing Date (If Appropriate)
	4,481,827	11/13/84	Bilstad et al			
	4,526,515	7/2/[85	DeVries			
	5,232,437	8/3/939	Lysaght et al			
	5,588,816	12/31/96	Abbott et al.			
	RE 36,871	9/12/00	Epstein et al			
	5,795,317	8/18/98	Brierton et al.			

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FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	Class	Subclass	Translation Yes No

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(E)

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6-302

Patent

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application of : Westberg et al. Examiner: P. Bianco
Serial No. : 09/389,504 Group Art Unit: 3762
Filed : September 3, 1999
For : Blood Separation Systems and Methods Using Multiple Function Pump Station
to Perform Different On-Line Processing Tasks

AMENDMENT A

Commissioner of Patents
and Trademarks
Washington, D.C. 20231

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Sir:

The Examiner's attention is directed to the Information Disclosure Statement that accompanies this amendment.

This Amendment responds to the Office Action mailed December 26, 2001. An automatic three month extension of time to respond, up to and including June 26, 2002, is respectfully requested. The requisite fee accompanies this amendment.

Please amend the application as follows:

IN THE CLAIMS:

Please cancel claims 4, 5, 20, 21, 35, 41 and 42.

Please consider the following set of pending claims 1-3, 6-19, 22-34, 36-40 and 43-46, of which claims 1, 2, 6, 7, 9, 10, 12, 14, 16-19, 22, 23, 28, 29, 33, 36, 40, 43 and 44 have been amended, as attached in clean form as well as in marked-up form showing changes in the amended claims relative to the previous version of the claims according to 37 C.F.R. §1.121(c)(3):

Clean Version of Pending Claims 1-3, 6-19, 22-34, 36-40 and 43-46

1 (Once amended). A blood processing system comprising
a donor flow channel to convey fluid to and from a donor,
a blood processing flow channel including a blood separation chamber to separate a
blood component from donor blood,
a blood component collection flow channel including a blood component collection
container,
a pump station communicating with the donor flow channel, the blood processing flow
channel, and the blood component collection flow channel,
a controller to operate the pump station in multiple modes, including a processing mode,
during which the pump station is operated to convey blood in the donor flow channel into the blood
processing flow channel for separation of the blood component in the blood separation chamber,
and a collection mode, during which the pump station is operated to convey at least some of the
blood component in the blood processing flow channel into the blood component collection flow
channel for collection in the blood component collection container, and a blood component return
mode, during which the pump station is operated to convey at least some of the blood component in
the blood processing flow channel into the donor flow channel for return to the donor, and
a utility flow channel including a processing fluid container,
the pump station communicating with the utility flow channel, and
the controller configured to operate the pump station during the blood component return
mode to convey processing fluid in the utility flow channel into the donor flow channel for mixing with
the blood component returned to the donor.

2 (Once amended). A system according to claim 1 or 7
wherein the blood component collection flow channel includes a filter to remove
undesired materials from the blood component before entering the blood component collection
container.

3. A system according to claim 2
wherein the filter removes leukocytes.

6 (Once amended). A system according to claim 1
wherein the processing fluid includes saline.

7 (Once amended). A blood processing system comprising
a donor flow channel to convey fluid to and from a donor,
a blood processing flow channel including a blood separation chamber to separate a

blood component from donor blood,

a blood component collection flow channel including a blood component collection container,

a pump station communicating with the donor flow channel, the blood processing flow channel, and the blood component collection flow channel,

a controller to operate the pump station in multiple modes, including a processing mode, during which the pump station is operated to convey blood in the donor flow channel into the blood processing flow channel for separation of the blood component in the blood separation chamber, and a collection mode, during which the pump station is operated to convey at least some of the blood component in the blood processing flow channel into the blood component collection flow channel for collection in the blood component collection container, and

a utility flow channel including a processing fluid container,

the pump station communicating with the utility flow channel, and

the controller configured to operate the pump station in a processing fluid transfer mode, during which the pump station is operated to convey processing fluid in the utility flow channel into the blood processing flow channel or the blood component collection flow channel for mixing with the blood component.

8. A system according to claim 7

wherein the processing fluid includes a blood component additive.

9 (Once amended). A system according to claim 1 or 7

wherein the pump station includes a fluid pressure actuated pump and an actuator to apply fluid pressure to the pump, and

wherein the controller is coupled to the actuator.

10 (Once amended). A system according to claim 1 or 7

wherein the pump station, the donor flow channel, the blood processing flow channel, and the blood component collection flow channel communicate within a cassette.

11. A system according to claim 10

further including an actuator to receive the cassette and operate the pump station, and wherein the controller is coupled to the actuator.

12 (Once amended). A system according to claim 1 or 7

wherein the blood processing flow channel includes a blood component holding container to hold the blood component, and

wherein, in the collection mode, the pump station is operated to convey at least some of

the blood component in the blood component holding container into the blood component collection flow channel.

13. A system according to claim 12

wherein the controller operates the pump station in a blood component return mode, during which the pump station is operated to convey at least some of the blood component in the blood component holding container into the donor flow channel for return to the donor.

14 (Once amended). A system according to claim 1 or 7

wherein the blood processing flow channel includes a donor blood holding container to hold donor blood prior to separation in the blood separation chamber, and

wherein, in the processing mode, the pump station is operated to convey blood in the donor flow channel into the donor blood holding container.

15. A system according to claim 14

further including a second pump station, independent of the first defined pump station, communicating with the donor blood holding container and the blood separation chamber and operating to convey donor blood from the donor blood holding container in the blood separation chamber for separation in the blood component.

16 (Once amended). A system according to claim 1 or 7

wherein the pump station comprises first and second fluid pressure actuated pump stations, and a fluid pressure actuator operating to selectively apply fluid pressure pump strokes in tandem to the first and second pump stations to convey fluid from a source to a destination,

wherein, during at least one of the multiple modes, the controller switches between a first flow state, in which the pump strokes draw a fluid volume into the first pump station from the source and expel a fluid volume from the second pump station to the destination, and a second flow state, in which the pump strokes draw a fluid volume into the second pump station from the source and expel a fluid volume from the first pump station to the destination, the control function operating to synchronize the pump strokes so that fluid flow from the source is essentially continuous while fluid flow to the destination is pulsatile.

17 (Once amended). A system according to claim 1 or 7

wherein the blood component comprises red blood cells.

18 (Once amended). A system according to claim 1 or 7.

wherein the blood component comprises plasma.

19 (Once amended). A blood processing system comprising

a donor flow channel to convey fluid to and from a donor,

a blood processing flow channel including a blood separation chamber to separate red blood cells from donor whole blood,

a blood component collection flow channel including a red blood cell collection container and an in-line filter to remove leukocytes from the red blood cells before entering the red blood cell collection container,

a pump station communicating with the donor flow channel, the blood processing flow channel, and the blood component collection flow channel,

a controller to operate the pump station in multiple modes, including a processing mode, during which the pump station is operated to convey whole blood in the donor flow channel into the blood processing flow channel for separation of the red blood cells in the blood separation chamber, and a collection mode, during which the pump station is operated to convey at least some of the red blood cells in the blood processing flow channel into the blood component collection flow channel for on-line removal of leukocytes and collection in the red blood cell collection container, and a blood component return mode, during which the pump station is operated to convey at least some of the red blood cells in the blood processing flow channel into the donor flow channel for return to the donor, and

a utility flow channel including a processing fluid container,

the pump station communicating with the utility flow channel, and

the controller configured to operate the pump station during the blood component return mode to convey processing fluid in the utility flow channel into the donor flow channel for mixing with the red blood cells returned to the donor.

22 (Once amended). A system according to claim 19 wherein the processing fluid includes saline.

23 (Once amended). A blood processing system comprising

a donor flow channel to convey fluid to and from a donor,

a blood processing flow channel including a blood separation chamber to separate red blood cells from donor whole blood,

a blood component collection flow channel including a red blood cell collection container and an in-line filter to remove leukocytes from the red blood cells before entering the red blood cell collection container,

a pump station communicating with the donor flow channel, the blood processing flow channel, and the blood component collection flow channel,

a controller to operate the pump station in multiple modes, including a processing mode,

during which the pump station is operated to convey whole blood in the donor flow channel into the blood processing flow channel for separation of the red blood cells in the blood separation chamber, and a collection mode, during which the pump station is operated to convey at least some of the red blood cells in the blood processing flow channel into the blood component collection flow channel for on-line removal of leukocytes and collection in the red blood cell collection container, and

a utility flow channel including a processing fluid container,

the pump station communicating with the utility flow channel, and

the controller configured to operate the pump station in a processing fluid transfer mode, during which the pump station is operated to convey processing fluid in the utility flow channel into the blood processing flow channel or the blood component collection flow channel for mixing with the red blood cells.

24. A system according to claim 23

wherein the processing fluid includes a red blood cell additive.

25. A system according to claim 19

wherein the pump station includes a fluid pressure actuated pump and an actuator to apply fluid pressure to the pump, and

wherein the controller is coupled to the actuator.

26. A system according to claim 19

wherein the pump station, the donor flow channel, the blood processing flow channel, and the blood component collection flow channel communicate within a cassette.

27. A system according to claim 26

further including an actuator to receive the cassette and operate the pump station, and wherein the controller is coupled to the actuator.

28 (Once amended). A blood processing system comprising

a donor flow channel to convey fluid to and from a donor,

a blood processing flow channel including a blood separation chamber to separate red blood cells from donor whole blood,

a blood component collection flow channel including a red blood cell collection container and an in-line filter to remove leukocytes from the red blood cells before entering the red blood cell collection container,

a pump station communicating with the donor flow channel, the blood processing flow channel, and the blood component collection flow channel, and

a controller to operate the pump station in multiple modes, including a processing mode,

during which the pump station is operated to convey whole blood in the donor flow channel into the blood processing flow channel for separation of the red blood cells in the blood separation chamber, and a collection mode, during which the pump station is operated to convey at least some of the red blood cells in the blood processing flow channel into the blood component collection flow channel for on-line removal of leukocytes and collection in the red blood cell collection container,

the pump station comprising first and second fluid pressure actuated pump stations, and a fluid pressure actuator operating to selectively apply fluid pressure pump strokes in tandem to the first and second pump stations to convey fluid from a source to a destination,

wherein, during at least one of the multiple modes, the controller switches between a first flow state, in which the pump strokes draw a fluid volume into the first pump station from the source and expel a fluid volume from the second pump station to the destination, and a second flow state, in which the pump strokes draw a fluid volume into the second pump station from the source and expel a fluid volume from the first pump station to the destination, the control function operating to synchronize the pump strokes so that fluid flow from the source is essentially continuous while fluid flow to the destination is pulsatile.

29 (Once amended). A blood processing method comprising the steps of
coupling a multi-function pump station to a donor flow channel to convey fluid to and from a donor, a blood processing flow channel including a blood separation chamber to separate a blood component from donor blood, and a blood component collection flow channel including a blood component collection container,

operating the pump station in multiple modes, including a processing mode, during which the pump station is operated to convey blood in the donor flow channel into the blood processing flow channel for separation of the blood component in the blood separation chamber, and a collection mode, during which the pump station is operated to convey at least some of the blood component in the blood processing flow channel into the blood component collection flow channel for collection in the blood component collection container,

coupling the pump station to a utility flow channel including a processing fluid container,
and

operating the pump station in a processing fluid transfer mode, during which the pump station is operated to convey a processing fluid in the utility flow channel into the blood processing flow channel or the blood component collection flow channel for mixing with the blood component.

30. A method according to claim 29

wherein, in operating the pump station in the collection mode, the blood component is

passed through an in-line filter in the blood component collection flow channel to remove undesired materials from the blood component before entering the blood component collection container.

31. A method according to claim 30
wherein the filter removes leukocytes.

32. A method according to claim 29
further including operating the pump station in a blood component return mode, during which the pump station is operated to convey at least some of the blood component in the blood processing flow channel into the donor flow channel for return to the donor.

33 (Once amended). A method according to claim 29
further including operating the pump station during the blood component return mode to convey a processing fluid in the utility flow channel into the donor flow channel for mixing with the blood component returned to the donor.

34. A method according to claim 33
wherein the processing fluid includes saline.

36 (Once amended). A method according to claim 29
wherein the processing fluid includes a blood component additive.

37. A method according to claim 29
wherein the blood component comprises red blood cells.

38. A method according to claim 29
wherein the blood component comprises plasma.

39. A method according to claim 29
wherein the pump station comprises first and second fluid pressure actuated pump stations, and a fluid pressure actuator operating to selectively apply fluid pressure pump strokes in tandem to the first and second pump stations to convey fluid from a source to a destination,
wherein, during at least one of the multiple modes, operation of the pump station is switched between a first flow state, in which the pump strokes draw a fluid volume into the first pump station from the source and expel a fluid volume from the second pump station to the destination, and a second flow state, in which the pump strokes draw a fluid volume into the second pump station from the source and expel a fluid volume from the first pump station to the destination, the control function operating to synchronize the pump strokes so that fluid flow from the source is essentially continuous while fluid flow to the destination is pulsatile.

40 (Once amended). A red blood cell processing method comprising the steps of
coupling a multi-function pump station to a donor flow channel to convey fluid to and

from a donor, a blood processing flow channel including a blood separation chamber to separate red blood cells from donor whole blood, and a blood component collection flow channel including a red blood cell collection container and an in-line filter to remove leukocytes from the red blood cells before entering the red blood cell collection container,

operating the pump station in multiple modes, including a processing mode, during which the pump station is operated to convey whole blood in the donor flow channel into the blood processing flow channel for separation of the red blood cells in the blood separation chamber, and a collection mode, during which the pump station is operated to convey at least some of the red blood cells in the blood processing flow channel into the blood component collection flow channel for on-line removal of leukocytes and collection in the red blood cell collection container, and a blood component return mode, during which the pump station is operated to convey at least some of the red blood cells in the blood processing flow channel into the donor flow channel for return to the donor,

coupling the pump station to utility flow channel including a processing fluid container, and

operating the pump station during the blood component return mode to convey a processing fluid in the utility flow channel into the donor flow channel for mixing with the red blood cells returned to the donor.

43 (Once amended). A method according to claim 40 wherein the processing fluid includes saline.

44 (Once amended). A method according to claim 40

further including operating the pump station in a processing fluid transfer mode, during which the pump station is operated to convey a processing fluid in the utility flow channel into the blood processing flow channel or the blood component collection flow channel for mixing with the red blood cells.

45. A method according to claim 44 wherein the processing fluid includes a red blood cell additive.

46. A method according to claim 40

wherein the pump station comprises first and second fluid pressure actuated pump stations, and a fluid pressure actuator operating to selectively apply fluid pressure pump strokes in tandem to the first and second pump stations to convey fluid from a source to a destination, and

wherein, during at least one of the multiple modes, operation of the pump station is switched between a first flow state, in which the pump strokes draw a fluid volume into the first

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pump station from the source and expel a fluid volume from the second pump station to the destination, and a second flow state, in which the pump strokes draw a fluid volume into the second pump station from the source and expel a fluid volume from the first pump station to the destination, the control function operating to synchronize the pump strokes so that fluid flow from the source is essentially continuous while fluid flow to the destination is pulsatile.

REMARKS

An Information Disclosure Statement accompanies this amendment. The Statement seeks cross-citation of documents cited in co-pending Applications Serial Nos. 09/389,497, filed September 3, 1999, entitled "Blood Processing Systems and Methods with On-Line Mixing of Replacement Fluids" (currently pending before Examiner P. Bianco, Art Group 3762), 09/390,268, filed September 3, 1999, entitled "Programmable Fluid Pressure Actuated Blood Processing Systems and Methods" (currently pending before Examiner L. Deak, Art Group 3762), and 09/390,265, filed September 3, 1999, entitled "Fluid Pressure Actuated Blood Pumping Systems and Methods with Continuous Inflow and Pulsatile Outflow Conditions" (currently pending before Examiner L. Deak, Art Group 3762), all of which are owned by the assignee of the instant application.

Claims 1-3, 6-19, 22-34, 36-40 and 43-46 remain in the application. Of these, claims 1, 7, 19, 23 and 28 are independent apparatus claims and claims 29 and 40 are independent method claims.

The Examiner indicates that claims 5-8, 21-24, 28, 35-39 and 42-46 would be allowable if rewritten in independent form. The claims have been amended in light of this indication of allowability as follows:

- (1). Claims 4, 5, 20, 21, 35, 41 and 42 have been canceled.
- (2). Claim 1 has been amended to incorporate the subject matter of claims 1, 4 and 5 as filed.
- (3). Claim 7 has been amended to incorporate the subject matter of claims 1 and 7 as filed, and additionally to claim that processing fluid is conveyed into the blood processing flow channel or the blood component flow channel for mixing with the blood component. Support for this subject matter is found, e.g., on Specification page 115, lines 5-10.
- (4). Claims 2, 9, 10, 12, 14 and 16-18 have been amended to depend on amended claims 1 or 7.
- (5). Claim 6 has been amended to depend on amended claim 1.
- (6). Claim 19 has been amended to incorporate the subject matter of claims 19, 20 and 21 as filed.
- (7). Claim 22 has been amended to depend on amended claim 19.
- (8). Claim 23 has been amended to incorporate the subject matter of claims 19 and 23 as filed, and additionally to claim that processing fluid is conveyed into the blood processing flow channel or the blood component flow channel for mixing with the blood component. Support for this subject matter is found, e.g., on Specification page 115, lines 5-10.

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(9). Claim 28 has been amended to incorporate the subject matter of claims 19 and 28 as filed.

(10). Claim 29 has been amended to incorporate the subject matter of claims 29 and 35 as filed, and additionally to claim that processing fluid is conveyed into the blood processing flow channel or the blood component flow channel for mixing with the blood component. Support for this subject matter is found, e.g., on Specification page 115, lines 5-10.

(11). Claim 33 has been amended to reflect amendments made to independent claim 29, from which claim 33 depends.

(12). Claim 36 has been amended to depend on amended claim 29.

(13). Claim 40 has been amended to incorporate the subject matter of claims 40, 41 and 42.

(14). Claim 43 has been amended to depend on amended claim 40.

(15). Claim 44 has been amended to claim that processing fluid is conveyed into the blood processing flow channel or the blood component flow channel for mixing with the blood component. Support for this subject matter is found, e.g., on Specification page 115, lines 5-10.

In compliance with 37 C.F.R. §121(c)(3), a clean version of the entire set of pending claims is being submitted, as is a marked-up version showing changes in the amended claims 1, 2, 6, 7, 9, 10, 12, 14, 16-19, 22, 23, 28, 29, 33, 36, 40, 43 and 44 relative to the previous version of the claims.

Applicant believes the foregoing amendments place the case in condition for allowance. Allowance of claims 1-3, 6-19, 22-34, 36-40 and 43-46 is respectfully requested.

Respectfully submitted,

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Marked-Up Version of Amended Claims

1, 2, 6, 7, 9, 10, 12, 14, 16-19, 22, 23, 28, 29, 33, 36, 40, 43 and 44

1 (Once amended). A blood processing system comprising
a donor flow channel to convey fluid to and from a donor,
a blood processing flow channel including a blood separation chamber to separate a
blood component from donor blood,
a blood component collection flow channel including a blood component collection
container,
a pump station communicating with the donor flow channel, the blood processing flow
channel, and the blood component collection flow channel, [and]
a controller to operate the pump station in multiple modes, including a processing mode,
during which the pump station is operated to convey blood in the donor flow channel into the blood
processing flow channel for separation of the blood component in the blood separation chamber,
and a collection mode, during which the pump station is operated to convey at least some of the
blood component in the blood processing flow channel into the blood component collection flow
channel for collection in the blood component collection container, and a blood component return
mode, during which the pump station is operated to convey at least some of the blood component in
the blood processing flow channel into the donor flow channel for return to the donor, and
a utility flow channel including a processing fluid container,
the pump station communicating with the utility flow channel, and
the controller configured to operate the pump station during the blood component return
mode to convey processing fluid in the utility flow channel into the donor flow channel for mixing with
the blood component returned to the donor.

2 (Once amended). A system according to claim 1 or 7
wherein the blood component collection flow channel includes a filter to remove
undesired materials from the blood component before entering the blood component collection
container.

6 (Once amended). A system according to claim [5] 1
wherein the processing fluid includes saline.

7 (Once amended). [A system according to claim 1] A blood processing system
comprising
a donor flow channel to convey fluid to and from a donor,
a blood processing flow channel including a blood separation chamber to separate a

blood component from donor blood,

a blood component collection flow channel including a blood component collection container,

a pump station communicating with the donor flow channel, the blood processing flow channel, and the blood component collection flow channel,

a controller to operate the pump station in multiple modes, including a processing mode during which the pump station is operated to convey blood in the donor flow channel into the blood processing flow channel for separation of the blood component in the blood separation chamber, and a collection mode, during which the pump station is operated to convey at least some of the blood component in the blood processing flow channel into the blood component collection flow channel for collection in the blood component collection container, and

[further including] a utility flow channel including a processing fluid container,

[wherein] the pump station [communicates] communicating with the utility flow channel,

and

[wherein] the controller configured to operate[s] the pump station in a processing fluid transfer mode, during which the pump station is operated to convey processing fluid in the utility flow channel into the blood processing flow channel or the blood component collection flow channel for mixing with the blood component.

9 (Once amended). A system according to claim 1 or 7

wherein the pump station includes a fluid pressure actuated pump and an actuator to apply fluid pressure to the pump, and

wherein the controller is coupled to the actuator.

10 (Once amended). A system according to claim 1 or 7

wherein the pump station, the donor flow channel, the blood processing flow channel, and the blood component collection flow channel communicate within a cassette.

12 (Once amended). A system according to claim 1 or 7

wherein the blood processing flow channel includes a blood component holding container to hold the blood component, and

wherein, in the collection mode, the pump station is operated to convey at least some of the blood component in the blood component holding container into the blood component collection flow channel.

14 (Once amended). A system according to claim 1 or 7

wherein the blood processing flow channel includes a donor blood holding container to

hold donor blood prior to separation in the blood separation chamber, and

wherein, in the processing mode, the pump station is operated to convey blood in the donor flow channel into the donor blood holding container.

16 (Once amended). A system according to claim 1 or 7

wherein the pump station comprises first and second fluid pressure actuated pump stations, and a fluid pressure actuator operating to selectively apply fluid pressure pump strokes in tandem to the first and second pump stations to convey fluid from a source to a destination,

wherein, during at least one of the multiple modes, the controller switches between a first flow state, in which the pump strokes draw a fluid volume into the first pump station from the source and expel a fluid volume from the second pump station to the destination, and a second flow state, in which the pump strokes draw a fluid volume into the second pump station from the source and expel a fluid volume from the first pump station to the destination, the control function operating to synchronize the pump strokes so that fluid flow from the source is essentially continuous while fluid flow to the destination is pulsatile.

17 (Once amended). A system according to claim 1 or 7

wherein the blood component comprises red blood cells.

18 (Once amended). A system according to claim 1 or 7

wherein the blood component comprises plasma.

19 (Once amended). A blood processing system comprising

a donor flow channel to convey fluid to and from a donor,

a blood processing flow channel including a blood separation chamber to separate red blood cells from donor whole blood,

a blood component collection flow channel including a red blood cell collection container and an in-line filter to remove leukocytes from the red blood cells before entering the red blood cell collection container,

a pump station communicating with the donor flow channel, the blood processing flow channel, and the blood component collection flow channel, [and]

a controller to operate the pump station in multiple modes, including a processing mode, during which the pump station is operated to convey whole blood in the donor flow channel into the blood processing flow channel for separation of the red blood cells in the blood separation chamber, and a collection mode, during which the pump station is operated to convey at least some of the red blood cells in the blood processing flow channel into the blood component collection flow channel for on-line removal of leukocytes and collection in the red blood cell collection container, and a

blood component return mode, during which the pump station is operated to convey at least some of the red blood cells in the blood processing flow channel into the donor flow channel for return to the donor, and

a utility flow channel including a processing fluid container,

the pump station communicating with the utility flow channel, and

the controller configured to operate the pump station during the blood component return mode to convey processing fluid in the utility flow channel into the donor flow channel for mixing with the red blood cells returned to the donor.

22 (Once amended). A system according to claim [21] 19
wherein the processing fluid includes saline.

23 (Once amended). [A system according to claim 19] A blood processing system comprising

a donor flow channel to convey fluid to and from a donor,

a blood processing flow channel including a blood separation chamber to separate red blood cells from donor whole blood,

a blood component collection flow channel including a red blood cell collection container and an in-line filter to remove leukocytes from the red blood cells before entering the red blood cell collection container,

a pump station communicating with the donor flow channel, the blood processing flow channel, and the blood component collection flow channel,

a controller to operate the pump station in multiple modes, including a processing mode, during which the pump station is operated to convey whole blood in the donor flow channel into the blood processing flow channel for separation of the red blood cells in the blood separation chamber, and a collection mode, during which the pump station is operated to convey at least some of the red blood cells in the blood processing flow channel into the blood component collection flow channel for on-line removal of leukocytes and collection in the red blood cell collection container, and

[further including] a utility flow channel including a processing fluid container,

[wherein] the pump station [communicates] communicating with the utility flow channel,

and

[wherein] the controller configured to operate[s] the pump station in a processing fluid transfer mode, during which the pump station is operated to convey processing fluid in the utility flow channel into the blood processing flow channel or the blood component collection flow channel for mixing with the red blood cells.

28 (Once amended). [A system according to claim 19] A blood processing system comprising

a donor flow channel to convey fluid to and from a donor,

a blood processing flow channel including a blood separation chamber to separate red blood cells from donor whole blood,

a blood component collection flow channel including a red blood cell collection container and an in-line filter to remove leukocytes from the red blood cells before entering the red blood cell collection container,

a pump station communicating with the donor flow channel, the blood processing flow channel, and the blood component collection flow channel, and

a controller to operate the pump station in multiple modes, including a processing mode, during which the pump station is operated to convey whole blood in the donor flow channel into the blood processing flow channel for separation of the red blood cells in the blood separation chamber, and a collection mode, during which the pump station is operated to convey at least some of the red blood cells in the blood processing flow channel into the blood component collection flow channel for on-line removal of leukocytes and collection in the red blood cell collection container,

[wherein] the pump station [comprises] comprising first and second fluid pressure actuated pump stations, and a fluid pressure actuator operating to selectively apply fluid pressure pump strokes in tandem to the first and second pump stations to convey fluid from a source to a destination,

wherein, during at least one of the multiple modes, the controller switches between a first flow state, in which the pump strokes draw a fluid volume into the first pump station from the source and expel a fluid volume from the second pump station to the destination, and a second flow state, in which the pump strokes draw a fluid volume into the second pump station from the source and expel a fluid volume from the first pump station to the destination, the control function operating to synchronize the pump strokes so that fluid flow from the source is essentially continuous while fluid flow to the destination is pulsatile.

29 (Once amended). A blood processing method comprising the steps of

coupling a multi-function pump station to a donor flow channel to convey fluid to and from a donor, a blood processing flow channel including a blood separation chamber to separate a blood component from donor blood, and a blood component collection flow channel including a blood component collection container, [and]

operating the pump station in multiple modes, including a processing mode, during

which the pump station is operated to convey blood in the donor flow channel into the blood processing flow channel for separation of the blood component in the blood separation chamber, and a collection mode, during which the pump station is operated to convey at least some of the blood component in the blood processing flow channel into the blood component collection flow channel for collection in the blood component collection container,

coupling the pump station to a utility flow channel including a processing fluid container,
and

operating the pump station in a processing fluid transfer mode, during which the pump station is operated to convey a processing fluid in the utility flow channel into the blood processing flow channel or the blood component collection flow channel for mixing with the blood component.

33 (Once amended). A method according to claim 29

further including [coupling the pump station to a utility flow channel including a processing fluid container,] operating the pump station during the blood component return mode to convey a processing fluid in the utility flow channel into the donor flow channel for mixing with the blood component returned to the donor.

36 (Once amended). A method according to claim [35] 29

wherein the processing fluid includes a blood component additive.

40 (Once amended). A red blood cell processing method comprising the steps of coupling a multi-function pump station to a donor flow channel to convey fluid to and from a donor, a blood processing flow channel including a blood separation chamber to separate red blood cells from donor whole blood, and a blood component collection flow channel including a red blood cell collection container and an in-line filter to remove leukocytes from the red blood cells before entering the red blood cell collection container,

operating the pump station in multiple modes, including a processing mode, during which the pump station is operated to convey whole blood in the donor flow channel into the blood processing flow channel for separation of the red blood cells in the blood separation chamber, and a collection mode, during which the pump station is operated to convey at least some of the red blood cells in the blood processing flow channel into the blood component collection flow channel for on-line removal of leukocytes and collection in the red blood cell collection container, and a blood component return mode, during which the pump station is operated to convey at least some of the red blood cells in the blood processing flow channel into the donor flow channel for return to the donor,

coupling the pump station to utility flow channel including a processing fluid container,

and

operating the pump station during the blood component return mode to convey a processing fluid in the utility flow channel into the donor flow channel for mixing with the red blood cells returned to the donor.

43 (Once amended). A method according to claim [42] 40
wherein the processing fluid includes saline.

44 (Once amended). A method according to claim 40
further including [coupling the pump station to a utility flow channel including a processing fluid container, and] operating the pump station in a processing fluid transfer mode, during which the pump station is operated to convey a processing fluid in the utility flow channel into the blood processing flow channel or the blood component collection flow channel for mixing with the red blood cells.